TGFb+MMP+ifn b Sequence

		<u> </u>				
10	20	30	40	50	_	
	1234567890					
	COGGGCIGGG					60
MetProProS	erGlyLeuAr	gLeuLeuPro	LeuLeuLeuP	roLeuLeuTr	pLeuLeuVal	
CONTRACTOR	.002000000	CA	מיצווייטמיטמ	አር፡አርፕሮስ ጥ ፕሮኒል	СУПСТВОСТВО	120
	lyProProAl					120
remitter too	TALTOLICAT	aniasiyixu	oet titte App	Agrittaream	Ferenceranca	
GTGAAGOGGA	AGOGCATOGA	GGCCATCCGC	GGCCAGATCC	TOTCCAAGCT	GCGGCTCGCC	180
ValLysArgL	ysArgIleGl	uAlaIleArg	GlyGlnIleL	euSerLysLe	uArgLeuAla	
	GCCAGGGGGA					240
SerProProS	erGlnGlyGl	uValProPro	GlyProLeuP	roGluAlaVa	lleuAlaLeu	
ጥΆሶል ልሶልርንሳል	CCCGCGACCG	COMPANY	CaCaCattacaC	ADOCCUPACIO	CYCACOCOTOCAC	300
	hrargaspar					300
.,	immanatat	and minor	O I GOOLFILEG	aut toutur t	COTULI COLU	
GCCGACTACT	ACGCCAAGGA	GGTCACCCC	GIGCIAATGG	TOGAAACOCA	CAACGAAATC	360
AlaAspTyrT	yrAlaLysGl	uValThrArg	ValleuMetV	alGluThrHi	sAsnGluIle	
			•			
	TCAAGCAGAG					420
TyraspLysP	heLysGlnSe	rThrHisSer	IleTyrMetP	hePheAsmTh	rSerGluLeu	
CGAGAAGCC	TACCTGAACC	CONTRIBUTION	സസന്ദാര	ACCOMPANY OF THE	COMPACENCE	480
	alProGluPr					400
4			<u> </u>		. 	*
	AAGTGGAGCA					540
Leulysleul	ysValGluGl	nHisValGlu	LeuTyrGlnL	ysfyrSerAs	nAsnSerTrp	
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	GCAACOGGCT erAsnArgLe					600
widilitiens	erranargue	ubeualario	perezhpere	rogruntpre	nzerhueveb	
GTCACCGGAG	TIGIGOGGCA	GIGGITGAGC	COTTOGAGGGG	AAATTIGAGGG	CTTTCGCCTT	660
	alValArgGl					
					_	
	GCTCCTGTGA					720
SerAlaHisC	ysSerCysAs	pserargasp	AsnThrLeuG	lnVal <b>AspIl</b>	eAsnGlyPhe	
SCHISCALOSA.	GCCGAGGTGA	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	አጠብዮአጠ <b>ዮ</b> ኖላ	መውክ አረምምምም	(TTTT): \(\frac{1}{2}\) \(\frac{1}2\) \(	780
	rgArgGlyAs					760
	r-3rm Schritter	Promission.	**********	containtâre	OT THE COLUMN	
CTCATGGCCA	CCCCCCTCGA	GAGGGCCCAG	CATCTGCAAA	GOGAATTOGG	GGGAGGCGGA	840
LeuMetAlaŢ	hrProLeuGl	uArgAlaGln	HisleuGlnS	erGluPheGl	yGlyGly	
	GCTTTGGGC					900
pertroffent	lyLeuTrpAl	actActActA	Seralaalaa	ratteveully	riysglnLeu	
CAGCTOCAAG	AAAGGAGGA	CATTOTCAAA	TCTCACCACC	MATHEMATA A	GCTGAATGGA	960
	luArgThrAs					500

## TGFb+MMP+ifn b Sequence

	. 60	50	40			
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1020	CONCINE DO TO TO	1234367690	1234567890	1234567890	1234567890	1234567890
1020	CALACACACACACACA		אור ד ד דוים ביום ב			
	returbaner	etGluMetIn	LysIleProM	gAlaAspPhe	euThrTyrAr	LvsIleAsnL
1080	the state of the s					
TÓĐŲ	TCTIGICITC	AGAATGICIT	GAGATOCTOC	TOCCATOCAA	ACACTGCCTT	ראכאאנאנדויו
	eLeuValPhe	lnAsnValPh	GluMetLeuG	eAlaIleGln	vrThrAlaPh	CintaggerT
1140	CCTGGATGAA	TIGIACGICI	GAGACTATTG	TOTATE	ጣጣግግሚገገል	እ <i>ሶ</i> ንአ አ አረሳ አ አጣጥ
	uLeuAspGlu	alValArgLe	GluThrIleV	rG] vTrmAsn	hecercerTh	Army and and
1200	GGAAAGATIG	AAAAGCAAGA	GTACTAGAGG	אראמבוע אביוודיות י	. 3/13/13/19/19/19	omoon oo 200
	uGluArgLeu	luLysGlnGl	ValleuGluG	ALCOUNT TO THE	HINTHURALITY	CICCACCAGC
1260	GGIGCAAAGG	ATTACTICGAC	וליבאבאבאביווייי י	MANAMAMAN CO		
	gValGlnArg	vrTvrTrmAr	LantveserT	, ideieiee	I TOTOCICAAL	ACGIGGGAL#
		301301-4-	tempoour.	TALALeurus	i etserserit	ThrTrpGlu
1320	AGAGATCTTC	. W. C. L.	* (***********************************			
•	AGAGATOTTO aGlutlePhé	Lance Lettle 1	: 31-m-matt	CAACABUTAL	TCATGAAGIA	TACCTTAAAC
	aGluIlePhe	at Acres at Ar	c wranthmen	y rasnseriyi	_euMetLysT	TyrLeuLysI
1376	ጉ ጥልርነልጥ ተ		o aciaacuuw			
·-	- ttarac	S T-S CONTRACTORS C	ALAAACTIC	3 AAGACITAC	TCATCATTC	AGGAACTTIC
	- runa	A TIWELTD	r ArgasnPhe	r gArgLeuThi	cullelleA	ArgAsnPhel
		uga				•

## ifn+MMP+TGFb Sequence

10	20	30	40	50	. 60	
	1234567890					
ATGAACAACA	GETGGATCCT	CCACGCTGCG	MICCIGGIGI	CCTTCTCCAC	CACAGCCCIC	60
Metasnasna	rgTrpTleLe	uHisAlaAla	PheleuleuC	ysPheSerTh	rfhrAlaLeu	
						200
TCCATCAACT	ATAAGCAGCT	CCACCTCCAA	GAAAGGACGA	ACATIOGAA	AIGICAGGAG	120
Serlieasni	yrLysGlnLe	nenatu	GIUAIGIIIIA	Bittteatarã	achagnitato	
സസ്തുവുദ	AGCTGAATGG	AAAGATTAAC	CTCACCTACA	GGGCGGACTT	CAAGATOOCT	180
	lnLeuAsnGl					
		2		~ •	-	
	CGCAGAAGAT					240
MetGluMetT	hrGluLysMe	tGlnLysSer	TyrThrAlaP	heAlaIleGl	nGluMetLeu	
						***
					TGAGACTATT	300
GINASOVATA	neLeuvalPh	eargasnasn	Pneserseri	urgiyirpas	nGluThrIle	
Canacana Conc	TOCTGGATGA	acmoraceac	いることでもごけつけ	സസമമാമ	ልርምልርምልርልር	360
	euLeuAspGl					300
va+va21+90	concentor		CALLET VOLLE	incurcing to an i	1 1011200010	
GAAAAGCAAG	AGGAAAGATT	GACCTGGGAG	ATOTCCTCAA	CIGCICICCA	CTTGAAGAGC	420
	luGluArgLe					•
					CGCCTGGATG	480
TyrTyrTrpA	rgValGlnAr	gTyrLeuLys	LeumetLysT	yrAsnSerTy	rAlaTrpMet	•
CHILASHICAN SAG	CAGAGATCTT	_ സ്വാവ മ <i>്പ</i> ്വസ	יירודים מיירום מיירודים	CAACACTIVAC	CACAAACTTC	540
					rArgAsnPhe	Jay
	1001011	G = 9 =	2041401401	r 8. tr 920 tr 11.		
CAAAACGAAT	TOGGGGGAGG	CGGATCCCCG	CTCCCCCTTT	GGGCGGGAGG	GGGCTCAGCG	600
GlnAsnGluP	heGlyGlyGl	yGlySerPro	LeuGlyLeuT	rpAlaGlyGl	yGlySerAla	
					CCCCATCGAG	660
AlaAlaLeuS	erThrCysLy	sThrlleAsp	MetGluLeuV	allysArgLy	sArgIleGlu	
CY************************************	CCC3C3mcCm	con a second	- CONTINUES CONT	· · commonwell	CCAGGGGGAG	720
	•				rGlnGlyGlu	
· Au · · · · · · · · · · · · · · · · · ·	4,0222000			0000000		
					COCCCCACCCC	
ValProProG	lyProLeuPr	oGluAlaVal	LeuAlaLeuT	yrAsnSerTh	rargasparg	
					. OGCCAAGGAG	
VallAlaGlyG	luSerAlaGl	uProGLuPro	GluproGluA	Laasplyrly	rAlaLysGlu	
(III)	TO THE RESERVE	· (************************************	፣ <u>አ</u> ልሮሂኋል ል አጠናጥ	י אַרויַאַריאַ אַרייַי	CAAGCAGAGT	900
					eLysGlnSer	
, or every	WITHSUM TO A CO			. Ant magnety solit.	. Jey edine	
ACACACAGCA	TATATATGTI	CITCAACACA	TCAGAGCTOC	GAGAAGCGGT	ACCTGAACCC	960
ThrHisSerI	leTyrMetPh	ePheAsnThr	: SerGluLeuA	rgGluAlaVa	1ProGluPro	

## ifn+MMP+TGFb Sequence

10	20	30	40	50	60	
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	
GIGHICCICT	CCCGGGCAGA	GCTGCGTCTG	CIGAGGAGGC	TCAAGTTAAA	AGTOGAGCAG	1020
ValleuLeuS	erArgAlaGl	uleuArgleu	LeuArgArgL	eulysleuly	sValGluGln	
		ATACAGCAAC				1080
HisValGluL	eallateluri	sTyrSerAsn	AsnSerTrpA	rgTyrLeuSe	rAsnArgi.eu	
						<u>.</u>
					TGTGCGGCAG	1140
LeuAlaProS	erAspSerPr	oGluTrpl.eu	SerPheAspV	alThrGlyVa	lValArgGln	
		3 3 777773 00000			CONTRACTOR OF A	1000
					CICCIGIGAC	1200
TrpLeuserA	xagragragr	uIleGluGly	Pheargleus	eralamiscy	ssercysasp	
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		nValAspIle				1200
serur dustru	žitititie (131	marvahrra	Parentation	III IIII GEYNE	Aur Agr Aush	
CIRCOCACCA	יויאריאיזניבר איני	GAACCGGCCT	mongame	TCATGGCCAC	COOCCUGGAG	1320
		tAsnArgPro				
AGGGCCCAGC	ATCTGCAAAG	CtgaTCTAGA	$\infty$			1352
ArgAlaGlnH	isLenGlnSe	rSerArg				

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20
                                                   40
             MPPSGLRLLPLLLPLLWLLV-LTPGPPAAGLSTCKTIDMELVERER (EATRGOTLSKLRLASPPSGGE-VP-PGP
 NU TOF-# 1
             MHYCYLSAFLILM LYTVAL-----SLSTCSYLDMOOFMAKATEATRGOTLSKLKLISPP---EDYPEPEE
 Nu TGF+8 2
 Hu TGF-# 3
             MKHHLQRALVYLALLNFATYSL-----SLSYCTYLDFGHTKKKRYEATRGQTLSKLRLTSPP---EPTV-MTR
             CK TGF-# 4
 F9 YGF-# S
             MEN------LIMILUKLY-LHLSSLAMSLSTCKAVOMEEVAKRAJEAJRGOJLSKLKLDKTPDVDS-EK-NTV
                                         +++= +
                                              100
                                                                    120
Hu TGF-# 1
             LPEAVLALYHSIRDRYAGESAEPE-PEF------EADYYAKEVIRVLNV----ETHHEIYDKFKQSTHSIYMFF
Hu YGF-# Z
             VPPEVISITESTROLL--GEKAGR-RAAACERERSDEETTAKEVYKIOMPPFFPS-EHAIPPTFTRPT-FRIVRF
Hu TGF-# 3
             YPYGYLALY<u>NST</u>RELL--FEHGER-KEEGCTQENTESEYYAKEINKFDMIQGLAE-HNELAVCPKGIT-SKVFRF
Ck TGF-# 4
             FO TGF-# 5
             PSEATF-LYMSTLE-VIREKATRE-EEEHVGHDONJOOYYAKOVYRF----ESTTELEDHEFKFK-----F
                140
                                          160
                                                                      180
             MISEL----RE-AVPEPYLL5-RAELHLLRLKL----KY-EOHVELYO-----KYS<u>MYS</u>WRYLSWRLLAPSDSPE
Nu tor-8 1
Har TGF-8 2
             DVSA------HEK<u>NAS</u>HLU-KAEFRUFRLOHPK-ARVPEOR LELYO (LKSKOL TEPTORY IDSKYVKTRAEGE
Mu TGF-8 3
             <u>NYS</u>S-----YEK<u>HRI</u>NLF-RAEFBYLRYP<u>HPS</u>-SKRHEQRIELFQILRP-OEKIAKGRYIGGKNLPYRGTAE
Ck 1GF-B 4
            TASSSCSTSSRVRAEVGGRALLHRAELRHLROKAAADSAGTEORLELYOGTG-----MASWRTLHGRSVRATAODE
            HASHV-----REHYGNU-SLLH-HAELRNYK-KOTO--KWNDORMELFW--KYGENGTTHSRYLESKTITPYTOOE
Fg TGF-8 5
                 200
                                    $$0
            WESTDYTGYPROWESEGGETEGFRESANCSE ------DSRDWTLQYDIN-GFTTGR-----RGDLATT----
Hu TGF-8 1
RU TGF-# 2
            wlsfdytdavhewlhikornlgfki Slincpctfypshnyt i p<u>iks</u>eelearfa-gidgistyyscdoktikstrk
            WESPOYIDTVREWLERRESNEGLETSINCPCHTFOP-HCDILENTHEVMETER CVONEDOHGROOLGREK---K
HU TGF-8 3
            WASFDYTDAVKOVASGSELLGYFKLSVHCPCEHGPG-HADEHRISIEGFEGG------REDNOSIA---K
CR TGF-# 4
fg TGF-# 5
            260
                                               1 580
                                                                      3.00
             ----hchwrpflelkatplera-gh--loss---rhrraldtwycfsst--eknccvpolyidfrkdlgwkwinep
HU TGF-B 1
Hu TGF-# 2
            kwsgkt---phillmilpstrl-eso----ginrrkkraldaaycfrnv--odncclrply1ofkrolgukwinep
Hu TGF-# 3
            GEONY--N-PHLILMMIPPHRL-DNPGOGGQ---RKKRAŁOINYCFRHL--EENGCVRPLYIDFRODLGWKWYHEP
CK TGF-8 4
            -KERR--V-PYVLAMALPAERANE---LHSA---RRARDLDTDYCFGPGTDEKMCCVRPLYIDFRKDLOMKVIHEP
Fg 1GF-8 5
            ENT. ... KPYL - MITSHPAERIDIYI SS---REKRGVGOEYCFCNN - GPNCCVKPLYINFRKOLGWKVIHEP
                                                    ...
                                                              *** * *** * ** *** ***
                 250
                                                      360
                                                                                   390
Hu TGF-# 1
            kgyhanfclgfcpy1w51 otoy5kvlal yngunpga5aapccypqal eplp1vyyvgrkpkvegl 5xH1vR5ckcs
Au TGF-D 2
            KGYNANFCAGACPYLWSSDTOHSRYLSLYNT I NPEASA SPCCYSQOLEPL I ILYY I GKIPK I EQL SNM I VKSCKCS
NU TGF-# 3
            KGYYAHFCSGPCPYLRSADT I HSTYLGLYNTLNPEASASPCCYPOOLEPLT I LYYYGRTPKYEGLSNHYYKSCKCS
Ck TGF-8 4
            EGYMANFCHGPCPY I WSAD I DY I EVLÂL YNOHNPGASAAPCCVPOT LDPLP I I YYVGRWYRVEOL SHNVVRACKCS
fg 1GF-8 5
            KGTEANYCLGHCPY IWSHOTOYSKYL SLYNONHPGAS I SPCCYPOYLEPLP ( I YYYGR I AKYEOL SHHYYRSCHCS
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Protein	· Sequence	Reference
MMP-I/MMP-8	•	
Human type I collagen (al)	Ala-Pro-Gin-Gly-11 Ilc176-Ala-Gly-Gin	80
Human type I collagen (a2)	Gly-Pro-Gln-Gly-ns ~ Leums-Leu-Gly-Ala	80
Human type II collagen	Gly-Pro-Gin-Gly175~Leu716-Ala-Gly-Gln	80
Human type III collagen	Gly-Pro-Leu-Gly-11 - Reno-Ala-Gly-lie	80
Human az macroglobulin	Gly-Pro-Glu-Gly Leuces-Arg-Val-Gly	84
Rat as macroglobulin	Als-Ala-Tyr-Hisssi ~ Leuss Val-Ser-Gin	84
Rat az-macroglobulin	Met-Asp-Ala-Pheson - Leuson-Glu-Ser-Ser	84
Rat at-macroglobulin	Glu-Pro-Gin-Alassa Lensse-Ala-Met-Str	84
Rat a - macroglobulin	Gin-Ala-Len-Alass ~ Meloss-Ser-Ala-IIc	84
Chicken ovostatin	Pro-Ser-Tyr-Phears - Leuara-Asn-Ala-Gly	79
Human pregnancy zone protein	Tyr-Glu-Alo-Glyon - Leugas-Gly-Val-Val	84
Human oregnancy zone protein	Ala-Gly-Leu-Glyssa ~ Value Val-Glu-Arg	84
Human pregnancy zone protein	Ala-Gly-Leu-Gly757 - Ile751-Ser-Ser-Thr	84
aProtease inhibitor	Gly-Ala-Met-Phense~Leursy-Glu-Ala-lie	85
Human aggreenn	Ile-Pro-Glu-Asnui - Phenz-Phe-Gly-Val	86
Human aggrecan	Thr-Glu-Gly-Gluma~Alagn-Arg-Gly-Ser	86
Human cartilage link	Arg-Ala-Ile-Histo - Ile 17-Gln-Ala-Glu	87 88
Human insulin-like growth factor	Leu-Arg-Ala-Tyree~Leu tor-Leu-Pro-Ala	84
binding protein-3	·	
MMP-2	Gly-Ala-Hyp-Gly 127 - Leuser-Glx-Gly-His	24
Guinea pig a l (I) gelatin	Gly-Pro-Gla-Gly ₁₉₀ - Valigi-Arg-Gly-Glu	30
Rat al (1) gelatin	Gly-Pro-Ala-Gly ₂₂₇ ~ Val ₂₇₈ -Gln-Gly-Pro	30
Rat al(I) gelatin	Gly-Pro-Ser-Glyso ~ Leuss-Hyp-Gly-Pro	30
Rat al (I) gelatin	Gly-Pro-Ala-Gly31 - Glu32 Arg-Gly-Ser	30
Rat at(1) gelatin	Gly-Ala-Lys-Glysal ~ Leusar Thr-Gly-Ser	30
Rat al(I) gelatin	Gly-Pro-Ala-Glyssa~Ginsty-Asp-Gly-Pro	30
Rat & I(I) gelatin Rat & I(I) gelatin	Gly-Pro-Ala-Glyara - Phears-Ala-Gly-Pro	30
Rat al(I) gelatin	Gly-Pro-lie-Gly ₆₇₆ ~ Asn ₆₇₇ Val-Gly-Ala	30
Rat al(I) gelatin	Gly-Pro-Hyl-Cly615 ~ Screen-Arg-Gly-Ala	30
Bovine type I collegen (a1)	Gly-Pro-Gln-Gly773 ~ Ile776-Ala-Gly-Gln	22
Bovine type I collagen (a2)	Gly-Pro-Gin-Gly775 - Leurs-Leu-Gly-Ala	2.2
Human agerecan	Ile-Pro-Glu-Asna, -Phena-Phe-Gly-Vel	89
Human galectin-3	Pro-Pro-Gly-Alasz - Tyrer His-Gly-Ala	90
Human cartilage link	· Arg-Ala-He-Hista Netr-Gln-Ala-Glu	, 87
Humao cartilage link	Gly-Pro-His-Leuzs ~ Leuzs-Val-Glu-Alo	87
Human insulin-like growth factor	Leu-Arg-Ala-Tyron - Leu ar Leu-Pro-Ala	\$8
binding protein-3		
MMP-3	• (	79
Human ormacroglobulin	Gly-Pro-Glu-Glys-i~Leuser-Arg-Val-Gly	79 79
Human az-macroglobulin	Arg-Val-Gly-Pheolo-Tytos-Glu-Ser-Asp	91
Human a _t -antichymotrypsin	Leu-Leu-Ser-Alaxo Leuxo Val-Glu-Thr	91
α ₁ -protease inhibitor	Glu-Ala-fle-Propy-Mersy-Ser-He-Pro	ői
Antithrombin III	He-Ala-Gly-Argas Serias-Leu-Ash-Pro	79, 92
Chicken ovostatin	Leu-Asn-Ala-Gly677~Phe678-Thr-Ala-Ser	93
Human aggrecau	Ile-Pro-Glu-Asinjai - Phomp Pho-Gly-Val	37
Substance P	Lys-Pro-Gin-Gin-Phe-Phe-Gly-Leu	43
Human ProMMP-1	Asp-Val-Ala-Gloss - Phost-Val-Lou-Thr Asp-Thr-Leu-Gloss - Valo-Met-Are-Lys	94
Human ProMMP-3	Asp-Val-Gly-Hiser - Pheen-Arg-Thr-Phe	- 94
Human ProMMP-3	Asp-val-diy-disa - Phoa-Met-Len-Thr	95
Human ProMMP-8	ASP-254-City-City+ Titoty-Meta-Ass-City-City	48
Human ProMMP-9	Asp-Leu-Gly-Arger ~ Phon-Gln-Thr-Pho	48
Human ProMMP-9	AND LEDYLINGS "TUBER AND THE PICTURE	21

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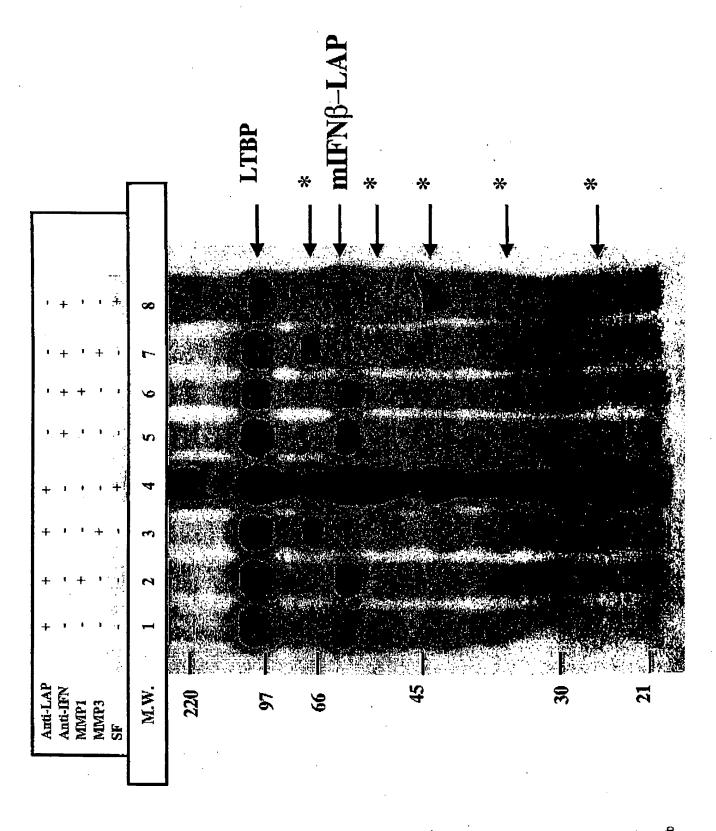
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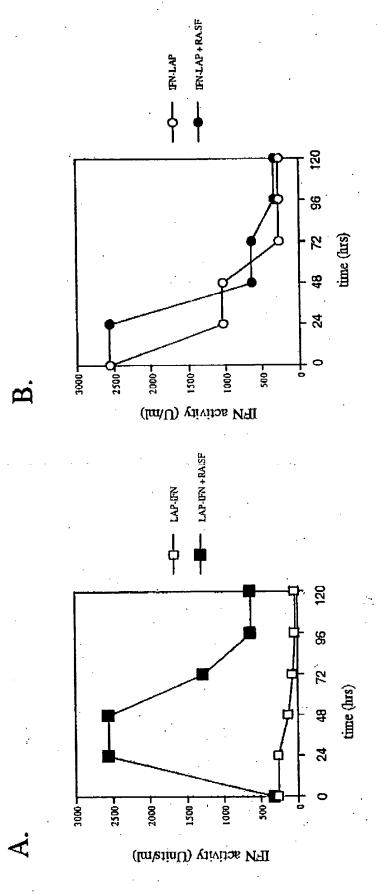
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	LTBP	LAP	E
	*	* *	* *
	<b>\</b>	+ +	<b>† †</b>
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' + ' + 4			t.
+ + + + 65			
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M.W.			1 1
1+116			, <del>3</del>
+ 1			
LAP-IFN IEN-LAP MMP1 MMP3	† <u>†</u>	Ì	
1 B Z Z	ei 🕏		
	LTBP		
·	LTBP Fusion protein		
	至		٠.

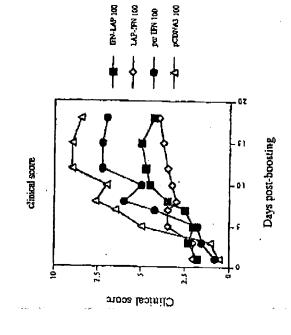
9. 18. LOZEEBB DIOPL

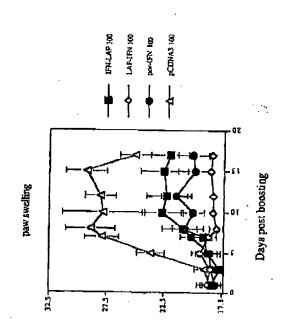
Fig. Ba





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paw swelling (mmx10-1)